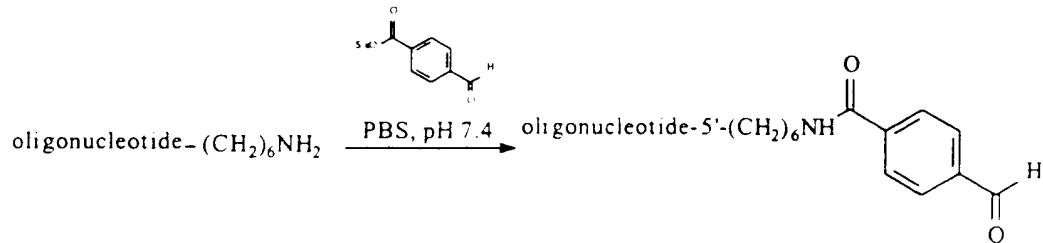




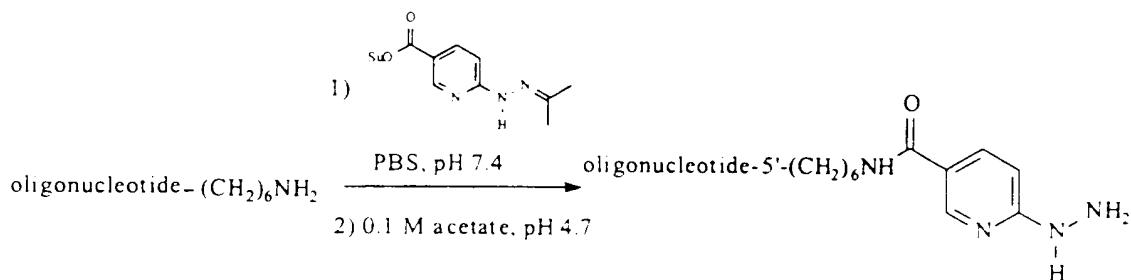
HELLER EHRLICH WHITE & MCALLISTER LLP
 Sheet 5 of 9
**Title HYDRAZINE-BASED AND C BASED BIFUNCTIONAL
CROSSLINKING REAGENTS**
 Applicant David A. Schwartz
 Serial No. To be assigned Filed March 22, 2001
 Our Docket No. 37154-751

FIGURE 5

Preparation of 5'-aromatic aldehyde-modified oligonucleotide:



Preparation of 5'-heteroaromatic hydrazine-modified oligonucleotide:



Conjugation of hydrazino-modified oligonucleotide to aldehyde-modified oligonucleotide

